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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/628,791

07/28/2003

Seiji Tawaraya

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EXAMINER

SHAH, MANISH S

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/628,791	Applicant(s) TAWARAYA ET AL.	
	Examiner Manish S. Shah	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-11,20 and 29-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4,6-11,20 and 33-37 is/are allowed.
- 6) ☒ Claim(s) 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/16/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirick (# US 3674729) in view of Roth (# US 5889084) and Ishikawa et al. (# US 2003/0231226).

Mirick discloses a correction ink for micro defect of a color pattern including a coloring agent (see Examples; column: 2, line: 47-60), a polymer (column: 2, line: 35-54) and a solvent, wherein an amount of the solvent is from 40 to 60 % by weight (column: 2, line: 1-6; line: 30-40), and viscosity of the ink is from 40 cps to 300 cps (see Examples). They also disclose that ink further including polymerization inhibitor (column: 5, line: 40-60).

Mirick differs from claim of the present invention is that (1) the ink includes monomer having two or more reactive functional group, wherein the amount of the monomer is from 15% to 65% by weight of the total amount of the correction ink. (2) The static surface tension of the ink at 25 degree C is 20 mN/m to 45 mN/m. (3) The polymer is diallyphthalate prepolymer.

Roth teaches that to get the chemically resistant and smear resistant printed image, ink includes monomer having two or more reactive functional group (see

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Abstract; column: 3, line: 40-55), wherein the amount of the monomer is from 15% to 65% by weight of the total amount of the correction ink (see Example: 1; column: 13, line: 1-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the correction fluid of Mirick by the aforementioned teaching of Roth in order to have the chemically resistant and smear resistant printed image.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate the ink with the surface tension from 20 to 45 mN/m, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955).

Ishikawa et al. teaches that to get the high quality printed image, ink composition includes the diallyphthalate polymer ([0056]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the correction fluid of Mirick by the aforementioned teaching of Ishikawa et al. in order to have the high quality printed image.

2. Claims 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. (# US 5480920) in view of Roth (# US 5889084) and Ishikawa et al. (# US 2003/0231226).

Sharma et al. discloses a correction ink for micro defect of a color pattern including a coloring agent (column: 3, line: 40-60; column: 4, line: 15-20), a polymer (column: 2, line: 35-54) and a solvent, wherein an amount of the solvent (acetone) is

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from 15 to 25 % by weight (column: 4, line: 1-10), and viscosity of the ink is from 200 cps to 800 cps (column: 4, line: 30-33). They also disclose that ink further including polymerization inhibitor (column: 4, line: 15-24). They also disclose that the carbon black or lamp black may be incorporated as a coloring pigment to match the color of the correction fluid, wherein coloring pigment is yellow oxide and raw amber (column: 4, line: 20-24).

Sharma et al. differs from claim of the present invention is that (1) the ink includes monomer having two or more reactive functional group, wherein the amount of the monomer is from 15% to 65% by weight of the total amount of the correction ink. (2) The static surface tension of the ink at 25 degree C is 20 mN/m to 45 mN/m. (3) The polymer is diallyphthalate prepolymer.

Roth teaches that to get the chemically resistant and smear resistant printed image, ink includes monomer having two or more reactive functional group (see Abstract; column: 3, line: 40-55), wherein the amount of the monomer is from 15% to 65% by weight of the total amount of the correction ink (see Example: 1; column: 13, line: 1-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the correction fluid of Sharma et al. by the aforementioned teaching of Roth in order to have the chemically resistant and smear resistant printed image.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate the ink with the surface tension from 20 to 45 mN/m,

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since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955).

Ishikawa et al. teaches that to get the high quality printed image, ink composition includes the diallyphthalate polymer ([0056]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the correction fluid of Sharma et al. by the aforementioned teaching of Ishikawa et al. in order to have the high quality printed image.

Allowable Subject Matter

3. Claims 1, 4, 6-11, 20 & 33-37 are allowed.

Response to Arguments

4. Applicant's arguments filed 08/18/2008 have been fully considered but they are not persuasive. Applicant argued that Ishikawa didn't teaches the diallyphthalate prepolymer in ink composition. Applicant even argued that in Ishikawa, diallyphthalate is just part of the list of the photocurable composition, and neither diallyphthalate nor prepolymer is used in examples, which is not persuasive. However, diallyphthalate prepolymer and diallyphthalate is same thing, Examiner didn't see any difference between diallyphthalate prepolymer and diallyphthalate . However, there is no such material name as diallyphthalate **prepolymer**. Applicant argued that there is none of the

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examples shows the diallyphthalate nor prepolymer. However in the specification in the paragraph [0056] it clearly teaches the photo curable compound is diallyphthalate. One place in the specification is enough evidence to teaches that particular compound, it doesn't have to be in the example. Therefore combination of Mirick in view of Ishikawa and Sharma in view of Ishikawa still reads on the present claimed invention.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Manish S. Shah/
Primary Examiner
Art Unit 2853

/MSS/